

## CLAIMS

What is claimed is:

1. A computer network communications method comprising the steps of:  
transmitting from a client to a server a request to establish a connection;  
5 iteratively
  - (a) maintaining the connection in the absence of a substantive message; and
  - (b) transmitting from the server to the client a substantive message upon existence of the substantive message at the server.
- 10 2. A method as claimed in Claim 1 wherein the step of maintaining the connection includes transmitting a predefined message from the server to the client at short intervals.
3. A method as claimed in Claim 2 wherein the step of transmitting the predefined message includes transmitting a single character indicator pre-established to  
15 indicate a non-substantive message.
4. A method as claimed in Claim 1 wherein the step of transmitting a substantive message further includes transmitting from the server to the client a predefined signal indicating existence at the server of the substantive message.
5. A method as claimed in Claim 4 further comprising the step of receiving at the  
20 server a client ready message indicating that the client is prepared to accept the substantive message.

6. A method as claimed in Claim 1 wherein transmissions between the client and the server occur using HTTP protocol.
7. A method as claimed in Claim 1 wherein client side transmissions are implemented at least partly in HTML.
- 5 8. A method as claimed in Claim 1 wherein client side transmissions are implemented at least partly in JAVA.
9. A method as claimed in Claim 1 wherein client side transmissions are implemented at least partly as an ActiveX control.
- 10 10. A method as claimed in Claim 1 wherein the request to establish the connection includes an identifier that uniquely represents a current client application.
11. A method as claimed in Claim 1 wherein the step of transmitting includes the server transmitting as substantive messages to at least one client new offers and/or updates to offers in a trading application.
- 15 12. A method as claimed in Claim 11 wherein the step of transmitting further includes the server transmitting between two clients counter offers and respective replies, such that instant messaging between the two clients is effectively provided.
- 20 13. A method as claimed in Claim 1 wherein the step of transmitting further includes the server exchanging substantive messages between two clients and thereby providing instant messaging.

14. A computer network communications system comprising:  
a request from a client computer to a server computer for establishing a connection; and  
the server in response to the request, maintaining the connection and upon  
5 existence of a substantive message at the server, transmitting to the client the substantive message.
15. A system as claimed in Claim 14 wherein the server maintains connection by transmitting a predefined message from the server to the client at short intervals.
16. A system as claimed in Claim 15 wherein the predefined message includes a  
10 single character indicator pre-established to indicate a non-substantive message.
17. A system as claimed in Claim 14 wherein upon existence of the substantive message at the server, the server further transmits to the client a predefined signal indicating existence at the server of the substantive message.
18. A system as claimed in Claim 17 wherein the server receives a client ready  
15 message indicating that the client is prepared to accept the substantive message.
19. A system as claimed in Claim 14 wherein transmissions between the client and the server occur using HTTP protocol.
20. A system as claimed in Claim 14 wherein client side transmissions are implemented at least partly in HTML.
- 20 21. A system as claimed in Claim 14 wherein client side transmissions are implemented at least partly in JAVA.

22. A system as claimed in Claim 14 wherein client side transmissions are implemented at least partly as an ActiveX control.
23. A system as claimed in Claim 14 wherein the request transmitted from the client includes an identifier that uniquely represents a current client application.
- 5 24. A system as claimed in Claim 14 wherein the server transmits as substantive messages to at least one client new offers and/or updates to offers in a trading application.
- 10 25. A system as claimed in Claim 24 wherein the server further transmits between two clients counteroffers and respective replies, such that instant messaging between the two clients is effectively provided.
26. A system as claimed in Claim 14 wherein the server further exchanges substantive messages between two clients and thereby provides instant messaging.